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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,081	07/02/2003	Wai Lam	63314-1016	5834
41881	7590	04/18/2006	EXAMINER	
KAYE SCHOLER LLP 425 PARK AVENUE NEW YORK, NY 10022-3598			ELMORE, STEPHEN C	
			ART UNIT	PAPER NUMBER
			2185	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/612,081	Applicant(s) LAM, WAI	
	Examiner Stephen Elmore	Art Unit 2185	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-94 is/are pending in the application.
- 4a) Of the above claim(s) 1-6, 22-53 and 69-94 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-21 and 54-68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


STEPHEN C. ELMORE
PRIMARY EXAMINER

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/30/03</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office action responds to the election filed January 4, 2006, where Applicant elected Group II (Claims 7-21 and 54-68).
2. Claims 1-6, 22-53, and 69-94 are withdrawn from further consideration due to the election.
3. Claims 7-21 and 54-68 are presented for examination.

Drawings

4. The drawings are objected to because:
 - a. The drawings are objected to under 37 CFR § 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following feature(s) must be shown or the feature(s) canceled from the claim(s):

- i. Claim 7, the feature "and recording the one or more of the data items" is not shown in the drawings;

- ii. Claim 54, the feature "a controller...for recording the one or more of the data items" is not shown in the drawings;

more specifically, in each instance above, the drawings are found to explicitly show a method of performing a step of flushing data in the cache and/or a step of performing a snapshot of data flushed from the cache, and can be interpreted to show sending data in the cache to disk, and they also explicitly show a controller for performing data flushing and/or a controller for performing a snapshot of data flushed from the cache, and can be interpreted to show a controller for sending data in the cache to a disk, however, they do not show the claimed features of "recording," whether claimed as a method step or as a feature of the controller, and thus, fail to meet 37 CFR § 1.83(a).

- b. Figures 1 and 5, contains extraneous drawing markings which are not clear, they appear to be copying artifacts;

- c. Figures 4C, and 6A-6D, contain unlabeled direction arrows whose meaning is unclear.

No new matter should be entered.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing

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on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR § 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities:

a. The title of the invention is not adequately descriptive of the claimed invention. A new title is required that is clearly indicative of the invention to which the claims are directed. See MPEP § 606.01. The title "Snapshot Marker" is not adequately descriptive because it is imprecise and vague. A suggested title could be, "Method and Cache Controller Incorporating a Marker for Improving A Snapshot of Data."

b. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR § 1.75(d)(1) and MPEP § 608.01(o). Correction of the following instances of claim language which do not have proper antecedent basis in the specification is required:

i. Claims 7-9, lines 7, 2, and 2, respectively, the feature "inserting a marker into the cache, wherein the marker is an indication that one or more of the data items received by the cache are to be recorded; and recording the one or more of the data items.";

ii. Claims 54-56, lines 5-6, 2, and 2, respectively, the feature "a controller for inserting a marker into the cache, wherein the marker is an indication that one or more of the data items received by the cache are to be recorded, and for recording the one or more of the data items";

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c. The specification is objected to because, at page 10, it incorporates by reference patent application 10/052,208; the reference needs to be updated to reflect that this application has now been allowed and to provide the US Patent Number.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 7-21 are rejected under 35 U.S.C. 112, first paragraph, because the specification,

while being enabling for, a method step (which has not yet been claimed),

in Claim 7, lines 6-7,

"inserting a marker into the cache, wherein the marker is an indication that one or more of the data items received by the cache are to be sent to disk; and sending to the disk the one or more of the data items."

however, the specification does not reasonably provide enablement for, the existing method step,

in Claims 7, lines 6-7,

"inserting a marker into the cache, wherein the marker is an indication that one or more of the data items received by the cache are to be recorded; and recording the one or more of the data items."

This is because the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and or use the invention commensurate in scope with these claims. The specification explicitly lacks any support (antecedent basis) for teaching one of ordinary skill in the art what Applicant meant by the method limitation "*inserting a marker into the cache, wherein the marker is an indication that one or more of the data items received by the cache are to be recorded; and recording the one or more of the data items*," as already noted in the

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objection to the specification above in paragraph 5.b., however, the specification does enable the suggested limitation at page 12, lines 19-21.

Claims 8-21 inherit the deficiencies of the preceding claim in the claim dependency chain.

8. Claims 54-68 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for, a controller limitation which has not yet been claimed, such as, in Claim 54, lines 4-6,

"a controller for inserting a marker into the cache, wherein the marker is an indication that one or more of the data items received by the cache are to be sent to disk, and for sending the one or more of the data items";

however, the specification does not reasonably provide enablement for, the existing controller limitation of, in Claim 54-56, lines 4-6,

"a controller for inserting a marker into the cache, wherein the marker is an indication that one or more of the data items received by the cache are to be recorded, and for recording the one or more of the data items";

This is because the specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and or use the invention commensurate in scope with these claims. The specification explicitly lacks any support (antecedent basis) for teaching one of ordinary skill in the art what Applicant meant by the controller limitation "*a controller for inserting a marker into the cache, wherein the marker is an indication that one or more of the data items received by the cache are to be recorded, and for recording the one or more of the data items,*" as already noted in the objection to the specification above in paragraph 5.b., however, the specification does enable the above suggested limitation at page 12, lines 19-21.

Claims 55-68 inherit the deficiencies of the preceding claim in the claim dependency chain.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Elmore whose telephone number is (571) 272-4436. The examiner can normally be reached on Mon-Fri from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 16, 2006


STEPHEN C. ELMORE
PRIMARY EXAMINER